

SPlice Form 1:

1 CGTCCTTCTT GGTCTTCGG GTCCAGGACT GTCCGGGGG TTGAGGGAAAG
51 GGGCCGTGCC CGGTGCCAGC CCAGGTGCTC GCGGCCTGGC TCCATGGCCC
101 TGGTCACAGT GAGCGGTTG CCCCCGGGCA GCGGCGCCTC CACGCCCGTG
151 GGGCCCTGGG ACCAGGGGT CCAGCGAAGG AGTCGACTCC AGCGAAGGCA
201 GAGCTTGGG GTGCTCCGTG GGGCTGTCTC GGGACTGCAG GATGGAGGG
251 ACAATGATGA TGCAGCAGAG GCCAGTTCTG AGCCAACAGA GAAGGCCCCG
301 AGTGAGGAGG AGCTCCACGG GGACCGAGCA GACTTCGGGC AAGGATCCCA
351 GAGTCCCCAG AAGCAGGAGG AGCAGAGGCA GCACCTGCAC CTCATGGTAC
401 AGCTGCTGAG GCCGCAAGGAT GACATCCGCC TGGCAGGCCA GCTGGAGGCA
451 CCCCAGGCTC CCCGGCTCCG CTACCTGCTG GTAGTTCTA CACGAGAAGG
501 AGAAGGTCTG AGCCAGGATG AGACGGTCTC CCTGGGCGTG GATTTCCCTG
551 ACAGCAGCTC CCCCAGCTGC ACCCTGGGC TGGTCTTGCC CCTCTGGAGT
601 GACACCCAGG TGTACTTACA TGGAGACGGG GGCTTCAGCG TGACGTCTGG
651 TGGGCAAAAG CGGATCTTCA AGCCCATCTC CATCCAGACC ATGTGGGCA
701 CACTCCAGGT ATTGACACAA GCATGTGAGG CAGCTCTAGG CAGCGGCCCT
751 GTACCGGGTG GCAGTGCCTC CACCTGGGC AGCCACTACC AGGAGAGACT
801 GAACTCCGAA CAGAGCTGCC TCAATGAGTG GACGGCTATG GCCGACCTGG
851 AGTCTCTGCG GCCTCCCAGC GCCGAGCCTG GCGGGTCCTC AGAACAGGAG
901 CAGATGGAGC AGGCAGATCCG TGCTGAGCTG TGGAAAGTGT TGGATGTCAG
951 TGACCTGGAG AGTGTCACTT CCAAAGAGAT CCGCCAGGCT CTGGAGCTGC
1001 GCCTGGGCT CCCCCCTCAGC CAGTACCGTG ACTTCATCGA CAACCAAGATG
1051 CTGCTGCTGG TGGCACAGCG GGACCGAGCC TCCCGCATCT TCCCCCACCT
1101 CTACCTGGG TCAGAGTGGG ACGCAGCAA CCTGGAGGAG CTGCAGAGGA
1151 ACAGGGTCAC CCACATCTTG AACATGGCCC GGGAGATTGA CAACTTCTAC
1201 CCTGAGCGCT TCACCTACCA CAATGTGCCG CTCTGGGATG AGGAGTCGGC
1251 CCAGCTGCTG CCGCACTGGG AGGAGACGCC CCGCTTCATT GAGGCTGCCA
1301 GAGCACAGGG CACCCACGTG CTGGTCCACT GCAAGATGGG CGTCAGCCGC
1351 TCAGCGGCCA CAGTGTGGC CTATGCCATG AAGCAGTACG AATGCAGCCT
1401 GGAGCAGGCC CTGCGCCACG TGCAGGAGCT CCGGCCCATC GCCCGCCCCA
1451 ACCCTGGCTT CCTGCGCCAG CTGCAGATCT ACCAGGGCAT CCTGACGGCC
1501 AGAACCTGAG GGTGGTGGGG AGGAGAAGGT TGTAGGCATG GAAAGAGGCC
1551 AGGCAGCCCC GAAAGAAGAG CCTGGGCCAC GGCCACGTAT AACACTCCGA
1601 GGGGTATGA GGTCCATCAG TCTTCTGGAG CCCTCTTGG AGCTGGAGAG
1651 CACCTCAGAG ACCAGTGACA TGCCAGAGGT CTTCTCTTCC CACGAGTCTT
1701 CACATGAAGA GCCTCTGCAG CCCTTCCCAC AGCTTGAAG GACCAAGGG
1751 GGCCAGCAGG TGGACAGGGG GCCTCAGCCT GCCCTGAAGT CCCGCCAGTC
1801 AGTGGTTACC CTCCAGGGCA GTGCCGTGGT GGCAACCCGG ACCCAGGCCT
1851 TCCAGGAGCA GGAGCAGGGG CAGGGCAGG GGCAGGGAGA GCCCTGCATT
1901 TCCTCTACGC CCAGGTTCCG GAAGGTGGT AGACAGGCCA GCGTGCATGA
1951 CAGTGGAGAG GAGGGCGAGG CCTGAGCCCT CACACATGCC CACGCTCCCC
2001 TGACACTGAA GAGGATCCAC AACTCCTGG AGAAACACCC TCACTGCTGT
2051 TGCCGCACAC ATTCTCTCA GCTCCGCCCC ATACCCGTCA CTACAGCCTC
2101 ACCTCCCACC CCTGTCACTA CGGCCTCACC TCCCACCCCT GTCACTACAG
2151 CCTCACCTCC TACAGCCTTA AGTCCCAGGC CCATGTCTGC CTGTCCAAGG
2201 GCTCAAGACT TTCTAACTGG GATGTGGTAG AGGGACTGAA GGTACCTTGT
2251 GGGCAACAG CACCCCTAGTT TCATTCTCAA CTCTAGCCCT GCACACTCAC
2301 CTGTGGCACG GAATGAAAAG AGAGCTTCCC GTGCAAAAG GGTCAAGCCT
2351 CCCACCCCCG CCCCCCTCCCT GCACCTCCTG TCCTCTCCCA GTTCATTCCCT
2401 GGAACCCAGCC AGGCCAGGCC ACCAGTGGCC CCAAAGGCCA GGCAAGGATCC
2451 TCAGGGCCCA GCGCGGGAG GCTGGAAGGG CTGGCAGATC GCTTCCCTCA
2501 TCCACCTCCA CCGGTCCAGG TCTTTGCTGC TGTCCCCAGA CCTCCTGTGA
2551 CACCAAGCCA GATCACAGGG CACCAAGGCCA GAGATAGTCT TCTTTTGTC
2601 CTTTCTGGCC TCTGGCTAGT CAGTTTTCA TAGCCTTACA GTATCTGGCT
2651 TTGTACTGAG AAATAAAACA CATTTCATA AAAAAAAA AAAAAAAA
2701 AAAAA

FEATURES:

5' UTR: 1-93
Start: 94-1506
Stop: 1509
3' UTR: 1510-2704

SPLICER FORM 2:

1 TGGTTGAGGG AAGGGGCCGT GCCCGGTGCC AGCCCAGGTG CTCGCGGCCT
51 GGCTCCATGG CCCTGGTCAC AGTGAGCGT TCGCCCCCGG GCAGCGGCCGC
101 CTCCACGCC GTGGGGCCCT GGGACCAGGC GGTCCAGCGA AGGAGTCGAC
151 TCCAGCGAAG GCAGAGCTTT GCGGTGCTCC GTGGGGCTGT CCTGGGACTG
201 CAGGATGGAG GGGACAATGA TGATGCAGCA GAGGCCAGTT CTGAGCCAAC
251 AGAGAAGGCC CCGAGTGAGG AGGAGCTCCA CGGGGACCAAG ACAGACTTCG
301 GGCAAGGATC CCAGAGTCCC CAGAAGCAGG AGGAGCAGAG GCAGCACCTG
351 CACCTCATGG TACAGCTGCT GAGGCCAG GATGACATCC GCCTGGCAGC
401 CCAGCTGGAG GCACCCCCGGC CTCCCCGCT CCGCTACCTG CTGGTAGTTT
451 CTACACGAGA AGGAGAAAGGT CTGAGCAGG ATGAGACGGT CCTCCTGGC
501 GTGGATTTCCTG CTGACAGCAG CTCCCCAGC TGCACCCCTGG GCCTGGTCTT
551 GCCCCCTGG AGTGACACCC AGGTGTACTT AGATGGAGAC GGGGGCTTCA
601 GCGTGACGTC TGGTGGCAA AGCCGGATCT TCAAGCCCAT CTCCATCCAG
651 ACCATGTGGG CCACACTCCA GGTATTGCAC CAAGCATGTG AGGCAGCTCT
701 AGGCAGCGGC CTTGTACCGG GTGGCAGTGC CCTCACCTGG GCCAGCCACT
751 ACCAGGAGAG ACTGAACCTCC GAACAGAGCT GCCTCAATGA GTGGACGGCT
801 ATGGCCGACC TGGAGTCCTCT GCGGCCCTCCC AGCGCCGAGC CTGGCGGGTC
851 CTCAGAACAG GAGCAGATGG AGCAGGCGAT CCGTGCTGAG CTGTGGAAAG
901 TGTGGATGT CAGTGACCTG GAGAGTGTCA CTTCCAAAGA GATCCGCCAG
951 GCTCTGGAGC TGCCTGGCTGGG GCTCCCCCTC CAGCAGTACG GTGACTTCAT
1001 CGACAACCCAG ATGCTGCTGC TGGTGGCACA GCGGGACCGA GCCTCCCGCA
1051 TCTTCCCCCA CCTCTACCTG GGCTCAGAGT GGAACGCAGC AAACCTGGAG
1101 GAGCTGAGA GGAACAGGGT CACCCACATC TTGAACATGG CCCGGGAGAT
1151 TGACAACCTTC TACCTGAGG CTTTCACCTA CCACAATGTG CGCCTCTGGG
1201 ATGAGGAGTC GGCCCAGCTG CTGCCGCACT GGAAGGAGAC GCACCGCTTC
1251 ATTGAGGCTG CAAGAGCACA GGGCACCCAC GTGCTGGTCC ACTGCAAGAT
1301 GGGCGTCAGC CGCTCAGCGG CCACAGTGCT GGCCTATGCC ATGAAGCAGT
1351 ACGAATGCAG CCTGGAGCAG GCCCTGCGCC ACAGTGCAGGA GCTCCGGCCC
1401 ATCGCCGCC CCAACCCCTGG CTTCTGCGC CAGCTGCAGA TCTACCAGGG
1451 CATCCTGACG GCCAGCCGCC AGAGCCATGT CTGGGAGCAG AAAGTGGGTG
1501 GGGTCTCCCC AGAGGAGCAC CCAGCCCCCTG AAGTCTCTAC ACCATTCCCA
1551 CTTCTTCCGC CAGAACCTGA GGGTGGTGGG GAGGAGAAGG TTGTAGGCAT
1601 GGAAGAGAGC CAGGCAGGCC CGAAAGAAGA GCCTGGGCCA CGGCCACGTA
1651 TAAACCTCCG AGGGGTCTAG AGGTCCATCA GTCTCTGGA GCCTCTTTG
1701 GAGCTGGAGA GCACCTCAGA GACCAGTGAC ATGCCAGAGG TCTTCTCTTC
1751 CCACGAGTCT TCACATGAAG AGCCTCTGCA GCCCTTCCCA CAGCTTGCAA
1801 GGACCAAGGG AGGCCAGCAG GTGGACAGGG GGCCTCAGCC TGCCCTGAAG
1851 TCCCGCCAGT CAGTGGTTAC CCTCCAGGGC AGTGCCTGGG TGGCAACCG
1901 GACCCAGGCC TTCCAGGGC AGGAGCAGGG GCAGGGCAG GGGCAGGGAG
1951 AGCCCTGCAT TTCCCTCTACG CCCAGGTTCC GGAAGGTGGT GAGACAGGCC
2001 AGCGTGCATG ACAGTGGAGA GGAGGGCGAG GCCTGAGCCC TCACACATGC
2051 CCACGCTCCC CTGACACTGA AGAGGATCCA CAACTCCTTG GAGAAACACC
2101 CTCACGCTTG TTGCCGCACA CATTCCCTCTC AGCTCCGCC CATACCCGTC
2151 ACTACAGCCT CACCTCCCAC CCCTGTCACT ACGGCCCTCAC CTCCCACCCCC
2201 TGTCACTACA GCCTCACCTC CTACAGCCTT AAGTCCCAGG CCCATGTCTG
2251 CCTGTCAGG AGGCTCAAGAC TTTCTAACTG GGATGTGGTA GAGGGACTGA
2301 AGGTACCTTT GGGGGCAACA GCACCCCTAGT TTCATTCTCA ACTCTAGCCCC
2351 TGCACACTCA CCTGTGGCAC GGAATGAAAAA CAGAGCTTCC CGTGCAAAAA
2401 GGGTCACGCC TCCCACCCCC GCCCCCTCCC TGCACTCCT GTCCCTCTCCC
2451 AGTTCATCTC TGGAACCCAGC CAGGCCAGGC AACAGTGGC CCCCCAAAGGC
2501 AGGCAGGATC CTCAGGCCAGC AGCCGCAGGA GGCTGGAAGG GCTGGCAGAT
2551 CGCTTCCCTC ATCCACCTCC ACCGGTCCAG GTCTTGCTG CTGTCCCCAG
2601 ACCTCCTGTG ACACACAGCC AGATCACAGG GCACCAAGGCC AGAGATAGTC
2651 TTCTTTTGT CCTTTCTGGC CTCTGGCTAG TCAGTTTTTC ATAGCCTTAC
2701 AGTATCTGGC TTTGTACTGA GAAATAAAAC ACATTTTCAT AAAAAAAA
2751 AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA
2801 AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA
2851 AA

FEATURES:

5' UTR: 1-56
Start: 57
Stop: 2034
3' UTR: 2037-2852

SPlicing FORM 3:

1 CCTGGTCCCTG CGGGTCCAGG ACTGTCCCAG GGGGTTGAGG GAAGGGGCCG
51 TGCCCGGTGC CAGCCCAGGT GCTCGCGGCC TGGCTCCATG GCCCTGGTCA
101 CAGTGAGCCG TTGCCCCCGG GCCAGCGGCC CCTCCACGCC CGTGGGGCCC
151 TGGGACCAAGG CGGTCCAGCG AAGGAGTCGA CTCCAGCGAA GGCAGAGCTT
201 TGCGGTGCTC CGTGGGGCTG TCCTGGGACT GCAGGATGGA GGGGACAATG
251 ATGATGCAGC AGAGGCCAGT TCTGAGCCAA CAGAGAAGGC CCCGAGTGAG
301 GAGGAGCTCC ACGGGGACCA GACAGACTTC GGGCAAGGAT CCCAGAGTCC
351 CCAGAAGCAG GAGGAGCAGA GGCAGCACCT GCACCTCATG GTACAGCTGC
401 TGAGGCCGCA GGATGACATC CGCCTGGCAG CCCAGCTGGA GGCAACCCGG
451 CCTCCCCGGC TCCGCTACCT GCTGGTAGTT TCTACACGAG AAGGAGAAGG
501 TCTGAGCCAG GATGAGACGG TCCTCCCTGG CGTGGATTTC CCTGACAGCA
551 GCTCCCCCAG CTGCAACCTG GGCCTGGTCT TGCCCCCTCTG GAGTGACACC
601 CAGGTGTACT TAGATGGAGA CGGGGGCTTC AGCGTGACGT CTGGTGGGCA
651 AAGCCGGATC TTCAAGCCCA TCTCCATCCA GACCATGTTG TCCTCAGAAC
701 AGGAGCAGAT GGAGCAGGGC ATCCGTGCTG AGCTGTGGAA AGTGGTGGAT
751 GTCAGTGACC TGGAGAGTGT CACTTCCAAA GAGATCCGCC AGGCTCTGGA
801 GCTGCGCTCG GGGCTCCCCC TCCAGCAGTA CCGTGACTTC ATCGACAACC
851 AGATGCTGCT GCTGGTGGCA CAGCAGGGAC GAGCCTCCCG CATCTCCCC
901 CACCTCTACC TGGGCTCAGA GTGGAACGCA GCAAACCTGG AGGAGCTGCA
951 GAGGAACAGG GTCACCCACA TCTTGAACAT GGCCTGGGAG ATTGACAAC
1001 TCTACCCCTGA GCGCTTCACC TACCACAATG TGCGCCTCTG GGATGAGGAG
1051 TCGGCCCAGC TGCTGCCGCA CTGGAAGGAG ACGCACCGCT TCATTGAGGC
1101 TGCAAGAGCA CAGGGCACCC ACGTGCTGGT CCACTGCAAG ATGGCGTCA
1151 GCGCTCAGC GGCCACAGTG CTGGCCTATG CCATGAAGCA GTACGAATGC
1201 AGCCTGGAGC AGGCCCTGCG CCACGTGCA GAGCTCCGGC CCATCGCCCG
1251 CCCCAACCCCT GGCTTCCCTGC GCCAGCTGCA GATCTACCAG GGCACTCTGA
1301 CGGCCAGAAC CTGAGGGTGG TGGGGAGGAG AAGGTTGTAG GCATGGAAGA
1351 GAGCCAGGCA GCCCCGAAAG AAGAGCCTGG GGCCACGGGG CACGTATAAA
1401 CCTCCGAGGG GTCATGAGGT CCATCAGTCT TCTGGAGCCC TCCTTGGGAG
1451 CTGGAGAGCA CCTCACTAGA CCAGTGACAT GCCAGAGGTC TTCTCTTCCC
1501 ACGAGTCTTC ACATGAAGAG CCTCTGCAGC CCTTCCCACA GCTGCAAGG
1551 ACCAAGGGAG GCCAGCAGGT GGACAGGGGG CCTCAGCCTG CCCTGAAGTC
1601 CGGCCAGTCA GTGGTTACCC TCCAGGGCAG TGCGTGGTG GCCAACCGGA
1651 CCCAGGCCTT CCAGGAGCAG GAGCAGGGGC AGGGGCAGGG GCAGGGAGAG
1701 CCCTGCATT CCTCTACGCC CAGGTTCCGG AAGGTGGTGA GACAGGCCAG
1751 CGTGCATGAC AGTGGAGAGG AGGGCGAGGC CTGAGCCCTC ACACATGCC
1801 ACGCTCCCT GACACTGAAG AGGATCCACA ACTCCTTGGA GAAACACCC
1851 CACGTCTGTT GCCGCACACA TTCCCTCTCAG CTCCGCCCA TACCCGTAC
1901 TACAGCCTCA CCTCCCACCC CTGTCACTAC GGCCTCACCT CCCACCCCTG
1951 TCACTACAGC CTCACCTCCT ACAGCCTTA GTCCCAGGCC CATGTCTGCC
2001 TGTCCAAGGG CTCAAGACTT TCTAACTGGG ATGTGGTAAAG GGGACTGAAG
2051 GTACCTTGG GGGCAACAGC ACCCTAGTT CATTCTCAAC TCTAGCCCTG
2101 CACACTCACC TGTGGCACGG AATGAAAACA GAGCTCCCG TGCAAAAAGG
2151 GTCACGCCCTC CCACCCCCGG CCCCTCCCTG CACCTCCTGT CCTCTCCCAG
2201 TTCATTCCCTG GAACCAGCCA GGCCAGGCAA CCAGTGGCCC CCAAAGGCAG
2251 GCAGGATCCT CAGGGCCAGG CGCGGGAGG CTGGAAGGGC TGGCAGATCG
2301 CTTCCCTCAT CCACCTCCAC CGGTCCAGGT CTTTGTGCT GTCCCCAGAC
2351 CTCCCTGTGAC ACCACGCCAG ATCACAGGGC ACCAGGCCAG AGATAGTCTT
2401 CTTTTGTCC TTTCTGGCCT CTGGCTAGTC AGTTTTTCAT AGCCTTACAG
2451 TATCTGGCTT TGTACTGAGA AATAAAACAC ATTTTCATAT TTGGTTAAAA
2501 AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA

FEATURES:

5' UTR: 1-88
 Start: 88
 Stop: 1311
 3' UTR: 1315-2540

Homologous proteins:Top 10 BLAST Hits

		Score	E
SPlice FORM 1:			
gi 8923483 ref NP_060327.1 hypothetical protein FLJ20515 >gi 7...	576	e-163	
gi 6714641 dbj BA89534.1 (AB036834) MAP kinase phosphatase [D...	337	2e-91	
gi 8922777 ref NP_060746.1 hypothetical protein FLJ10928 >gi 7...	233	3e-60	
gi 7242951 dbj BA92536.1 (AB037719) KIAA1298 protein [Homo sa...	143	4e-33	
gi 7301242 gb AAF56372.1 (AE003750) CG6238 gene product [Droso...	124	2e-27	
gi 4150963 emb CAA77232.1 (Y18620) DsPTP1 protein [Arabidopsis...	113	5e-24	
gi 9294518 dbj BAB02780.1 (AB023036) dual-specificity protein ...	113	5e-24	
gi 6862915 gb AAF30304.1 AC018907_4 (AC018907) putative dual-sp...	94	2e-18	
gi 6015037 sp O54838 DUS5_RAT DUAL SPECIFICITY PROTEIN PHOSPHAT...	92	9e-18	
gi 9910432 ref NP_064570.1 mitogen-activated protein kinase ph...	90	3e-17	
SPlice FORM 2:			
gi 8923483 ref NP_060327.1 hypothetical protein FLJ20515 [Homo...	576	e-163	
gi 6714641 dbj BA89534.1 (AB036834) MAP kinase phosphatase [D...	340	6e-92	
gi 8922777 ref NP_060746.1 hypothetical protein FLJ10928 [Homo...	229	1e-58	
gi 7242951 dbj BA92536.1 (AB037719) KIAA1298 protein [Homo sa...	162	1e-38	
gi 9294518 dbj BAB02780.1 (AB023036) dual-specificity protein ...	113	8e-24	
gi 4150963 emb CAA77232.1 (Y18620) DsPTP1 protein [Arabidopsis...	113	8e-24	
gi 4758212 ref NP_004411.1 dual specificity phosphatase 8 [Hom...	99	3e-19	
gi 6679156 ref NP_032774.1 neuronal tyrosine/threonine phospha...	96	2e-18	
gi 6862915 gb AAF30304.1 AC018907_4 (AC018907) putative dual-sp...	94	6e-18	
gi 6015037 sp O54838 DUS5_RAT DUAL SPECIFICITY PROTEIN PHOSPHAT...	92	2e-17	
SPlice FORM 3:			
gi 8923483 ref NP_060327.1 hypothetical protein FLJ20515 [Homo...	410	e-113	
gi 8922777 ref NP_060746.1 hypothetical protein FLJ10928 [Homo...	233	7e-60	
gi 6714641 dbj BA89534.1 (AB036834) MAP kinase phosphatase [D...	224	5e-57	
gi 7242951 dbj BA92536.1 (AB037719) KIAA1298 protein [Homo sa...	143	5e-33	
gi 9294518 dbj BAB02780.1 (AB023036) dual-specificity protein ...	113	1e-23	
gi 4150963 emb CAA77232.1 (Y18620) DsPTP1 protein [Arabidopsis...	113	1e-23	
gi 6862915 gb AAF30304.1 AC018907_4 (AC018907) putative dual-sp...	94	5e-18	
gi 6015037 sp O54838 DUS5_RAT DUAL SPECIFICITY PROTEIN PHOSPHAT...	92	2e-17	
gi 9910432 ref NP_064570.1 mitogen-activated protein kinase ph...	90	7e-17	
gi 9911130 gb AAA64693.2 (U15932) protein phosphatase [Homo sa...	90	1e-16	

BLAST to dbEST:SPlice FORM 1:

	Score	E
gi 9807071 /dataset=dbest /taxon=960...	1404	0.0
gi 10317998 /dataset=dbest /taxon=96...	1316	0.0
gi 10151079 /dataset=dbest /taxon=96...	1249	0.0
gi 10401153 /dataset=dbest /taxon=960...	1180	0.0
gi 10329921 /dataset=dbest /taxon=96...	1124	0.0
gi 7632969 /dataset=dbest /taxon=960...	791	0.0
gi 9155111 /dataset=dbest /taxon=9606...	779	0.0
gi 10994242 /dataset=dbest /taxon=96...	450	e-124

EXPRESSION INFORMATION FOR MODULATORY USE:

SPlice Form 1:

library source:

Expression information from BLAST dbEST hits:

gi|9807071 Human Pancreas
gi|10317998 Human colon adenocarcinoma
gi|10151079 Human Pancreas:adenocarcinoma
gi|10401153 Human Pancreas:epithelioid carcinoma
gi|10329921 Human lung: large cell carcinoma
gi|7632969 Human kidney: renal cell carcinoma
gi|9155111 Human Placenta choriocarcinoma
gi|10994242 Human ovary tumor tissue

Expression information from PCR-based tissue screening panels:

Human Brain
Human Fetal brain
Human fetal heart
Human fetal kidney
Human heart
Human kidney
Human uterus
Human thyroid

SPLICING FORM 1:

1 MALVTCSRSP PGSGASTPVG PWDQAVQRRS RLQRQSFV LRGAVLGLQD
51 GGDNDDAEEA SSEPTEKAPS EEELHGDQTD FGQGSQSPQK QEEQRQHLHL
101 MVQLLRPQDD IRLAAQLEAP RPPRLRYLLV VSTREGEGLS QDETVLLGVD
151 FPDSSSPSCT LGLVLPLWSD TQVYLDGDGG FSVTSGGQSR IFKPISIQT
201 WATLQVLHQA CEAALGSGLV PGGSALTWAS HYQERLNSEQ SCLNEWTAMA
251 DLESLRPPSA EPGGSSESEQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL
301 ELRLGLPLQQ YRDFIDNQML LLVAQRDRAS RIFPHLYLGS EWNAANLEEL
351 QRNRVTHILN MAREIDNFYP ERFTYHNVR WDEESAQLLP HWKETHRFIE
401 AARAQGTHV1 VHCKMGVSRS AATVLAYAMK QYECSSLEQAL RHVQELRPIA
451 RPNPGFLRQL QIYQGILTAR T

SPLICING FORM 2:

1 MALVTCSRSP PGSGASTPVG PWDQAVQRRS RLQRQSFV LRGAVLGLQD
51 GGDNDDAEEA SSEPTEKAPS EEELHGDQTD FGQGSQSPQK QEEQRQHLHL
101 MVQLLRPQDD IRLAAQLEAP RPPRLRYLLV VSTREGEGLS QDETVLLGVD
151 FPDSSSPSCT LGLVLPLWSD TQVYLDGDGG FSVTSGGQSR IFKPISIQT
201 WATLQVLHQA CEAALGSGLV PGGSALTWAS HYQERLNSEQ SCLNEWTAMA
251 DLESLRPPSA EPGGSSESEQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL
301 ELRLGLPLQQ YRDFIDNQML LLVAQRDRAS RIFPHLYLGS EWNAANLEEL
351 QRNRVTHILN MAREIDNFYP ERFTYHNVR WDEESAQLLP HWKETHRFIE
401 AARAQGTHV1 VHCKMGVSRS AATVLAYAMK QYECSSLEQAL RHVQELRPIA
451 RPNPGFLRQL QIYQGILTAS RQSHVWEQKV GGVSPEEHPA PEVSTPFPLL
501 PPEPEGGEE KVVGMEESQA APKEEPGPRP RINLRGVMRS ISLLEPSLE
551 ESTSETSDMP EVFSSHESHH EEPLOQPFQQL ARTKGQQQVD RGQPALKSR
601 QSVVTLQGSA VVANRTQAFQ EEQEQGQQGQGQ GEPCISSTPR FRKVVRQASV
651 HDSGEEGEA

SPLICING FORM 3:

1 MALVTCSRSP PGSGASTPVG PWDQAVQRRS RLQRQSFV LRGAVLGLQD
51 GGDNDDAEEA SSEPTEKAPS EEELHGDQTD FGQGSQSPQK QEEQRQHLHL
101 MVQLLRPQDD IRLAAQLEAP RPPRLRYLLV VSTREGEGLS QDETVLLGVD
151 FPDSSSPSCT LGLVLPLWSD TQVYLDGDGG FSVTSGGQSR IFKPISIQT
201 WSSEQEQQMEQ AIRAELWKVL DVSDLESVTS KEIROALELR LGLPLQQYRD
251 FIDNQMLLV AQRDRASRIF PHLYLGSEWN AANLEELQRN RVTHILNMAR
301 EIDNFYPERF TYHNVRWDE ESAQLPHWK ETHRFIEAAR AQGTHVLVHC
351 KMGVSRSAAT VLAYAMKQYE CSLEQALRHV QELRPIARPN PGFLRQLQIY
401 QGILTART

FEATURES:**Functional domains and key regions:****SPLICING FORM 1:**

[1] PDOC00004 PS00004 CAMP_PHOSPHO_SITE
CAMP- and cGMP-dependent protein kinase phosphorylation site

34-37 RRQS

[2] PDOC00005 PS00005 PKC_PHOSPHO_SITE
Protein kinase C phosphorylation site

Number of matches: 6

1	65-67	TEK
2	132-134	STR
3	254-256	SLR
4	292-294	TSK
5	395-397	THR
6	468-470	TAR

[3] PDOC00006 PS00006 CK2_PHOSPHO_SITE
Casein kinase II phosphorylation site

Number of matches: 6

1	70-73	SEEE
2	132-135	STRE
3	140-143	SQDE
4	266-269	SEQE
5	286-289	SDLE
6	292-295	TSKE

[4] PDOC00007 PS00007 TYR_PHOSPHO_SITE
Tyrosine kinase phosphorylation site

363-369 REIDNFY

[5] PDOC00008 PS00008 MYRISTYL
N-myristoylation site

Number of matches: 8

1	12-17	GSGAST
2	43-48	GAVLGL
3	47-52	GLQDG
4	218-223	GLVPGG
5	223-228	GSALTW
6	339-344	GSEWNA
7	416-421	GVRSA
8	465-470	GILTAR

BLAST Alignment to Top Hit:

SPlice Form 1:

>gi|8923483|ref|NP_060327.1| hypothetical protein FLJ20515
>gi|7020674|dbj|BAA91228.1| (AK000522) unnamed protein
product [Homo sapiens]
Length = 394

Score = 576 bits (1469), Expect = e-163
Identities = 290/312 (92%), Positives = 296/312 (93%), Gaps = 1/312 (0%)

Query: 1 MALVTVSRSPPGSGASTPVGPWDQAVQRRSRLQRRQSFAVLRAVGLQDGDDNDDAAEA 60
MALVTVSRSPPGSGASTPVGPWDQAVQRRSRLQRRQSFAVLRAVGLQDGDDNDDAAEA
Sbjct: 1 MALVTVSRSPPGSGASTPVGPWDQAVQRRSRLQRRQSFAVLRAVGLQDGDDNDDAAEA 60

Query: 61 SSEPTEKAPSEEELHGDQTDFGQGSQSPQKQEEQRQHLHLMVQLLRPQDDIRLAAQLEAP 120
SSEPTEKAPSEEELHGDQTDFGQGSQSPQKQEEQRQHLHLMVQLLRPQDDIRLAAQLEAP
Sbjct: 61 SSEPTEKAPSEEELHGDQTDFGQGSQSPQKQEEQRQHLHLMVQLLRPQDDIRLAAQLEAP 120

Query: 121 RPPRLRYLLVVSTREGEGLSQDETVELGVDFPDSSSPSCTLGLVLPLWSDTQVYLDGDGG 180
RPPRLRYLLVVSTREGEGLSQDETVELGVDFPDSSSPSCTLGLVLPLWSDTQVYLDGDGG
Sbjct: 121 RPPRLRYLLVVSTREGEGLSQDETVELGVDFPDSSSPSCTLGLVLPLWSDTQVYLDGDGG 180

Query: 181 FSVTSGGQSRIFKPISIQTMWATLQVLHQACEAALGSGLVPGGSALTWASHYQERLNSEQ 240
FSVTSGGQSRIFKPISIQTMWATLQVLHQACEAALGSGLVPGGSALTWASHYQERLNSEQ
Sbjct: 181 FSVTSGGQSRIFKPISIQTMWATLQVLHQACEAALGSGLVPGGSALTWASHYQERLNSEQ 240

Query: 241 SCLNEWTAMADLESLRPPSAEPGGSSEQEQMEQAIRAELWKVLDV-SDLESVTSKEIRQA 299
SCLNEWTAMADLESLRPPSAEPGGSSEQEQMEQAIRAELWKV++ S E+ E+ +
Sbjct: 241 SCLNEWTAMADLESLRPPSAEPGGSSEQEQMEQAIRAELWKVLEESTSETSDMPEVFSS 300

Query: 300 LELRLGLPLQQY 311
E PLQ +
Sbjct: 301 HESSHEEPLQPF 312

>gi|6714641|dbj|BAA89534.1| (AB036834) MAP kinase phosphatase
[Drosophila melanogaster]
Length = 1045

Score = 337 bits (854), Expect = 2e-91
Identities = 204/537 (37%), Positives = 284/537 (51%), Gaps = 81/537 (15%)

Query: 1 MALVTVSRSPPGSGA-STPVGPWDQAVQRRSRLQRRQSFAVLRAVGLQDGDDNDDAAE 59
MALVTV RSP +G+ S G + R + F +G L L
Sbjct: 1 MALVTVQRSPSVAGSCNSDGESEDDEGNSKGNDRSECFFAGKGTALVL----- 49

Query: 60 ASSEPTEKAPSEEELHGDQTDFGQGSQSPQKQEEQRQHLHLMVQLLRPQDDIRLAAQLEA 119
A + SE L D T +QS + + HL M LL+ +D +++A +LE+
Sbjct: 50 ALKDIPPLTQSERRLSTDSTRSSNSTQS--NNSDIQLHLQSMFYLLQREDTLKMAVKLES 107

Query: 120 PRPPRLRYLLV-----VSTREGEGLSQDETVELGVDFPDSSSPS----- 158
R R RYLY++ S R + + +V +G SS S
Sbjct: 108 QRSNRTRYLVIASRSCCRSGTSDRRRHRIMRHHSVKVGGSGATKSSTPAVPTQRQLSVE 167

Query: 159 -----CTLGL-----VLPLWSDTQVY 174
C LG+ V+P+ +DT ++
Sbjct: 168 QTATEASSKCDKTADKENATAAGDNKNTSGMEESCLLGIDCNERTTIGLVVPIADTTIH 227

Query: 175 LDGDGGFSVTSGGQSRIFKPISIQTMWATLQVLHQACEAALGSGLVPGGSALTWASHYQE 234
LDGDGGFSV ++ IFKP+S+Q MW+ LQ LH+ + A + G + W S Y+
Sbjct: 228 LDGDGGFSVKVYEKTHIFKPVSQAMWSALQTLHKVSKKARENFFYASGSPSHDWLSSYER 287

Query: 235 RLNSEQSCLNEWTAMADLESLRPPSAEP--GGSSEQEOMEQAIRAELWKVLDVSDLESVT 292
R+ S+QSCLNEW AM LES RPPS + E+E+ E I+ +L ++ DL+ VT
Sbjct: 288 RIESDQSCLNEWNAMDALESRRPPSPDAIRNKPPEKEETESVIKMKLKAIMMSVLDLEVT 347

Query: 293 SKEIRQALELRLGLPLQQYRDFIDNQMLLVAQRDRASRIFPHLYLGSEWNAANLEELQR 352
SK IR LE L + L +Y+ FID +ML++ Q D ++IF H+YLGSEWNA+NLEELQ+
Sbjct: 348 SKYIRGRLEEILDMDLGEYKSFIDAEMLVILGQMDAPTKIFEHVYLGSEWNASNLEELQK 407

Query: 353 NRVTHILNMAREIDNFYPERFTYHNVRLWDEESAQLLPHWKETHRFIEAARAQGTHVLVH 412
N V HILN+ REIDNF+P F Y NVR++D+E LL +W +T R+I A+A+G+ VLHV
Sbjct: 408 NGVRHILNVTREIDNFFPGTFEYFNVRVYDDEKTNLKYWDDTFRYITRAKAEGSKVLVH 467

Query: 413 CKMGVSRSAATVLAYAMKQYECLEQALRPIARPNGFLRQLQIYQGILTA 469
CKMGVSRSA+ V+AYAMK Y+ +QAL HV++ R +PN FL QL+ Y G+L A
Sbjct: 468 CKMGVSRSAVVIAYAMKAYQWEFQQALEHVKRRSCIKPNKNFLNQLETYSGMLDA 524

>gi|8922777|ref|NP_060746.1| hypothetical protein FLJ10928
>gi|7023283|dbj|BAA91913.1| (AK001790) unnamed protein
product [Homo sapiens]
Length = 141

Score = 233 bits (588), Expect = 3e-60
Identities = 111/111 (100%), Positives = 111/111 (100%)

Query: 361 MAREIDNFYPERFTYHNVRLWDEESAQLLPHWKETHRFIEAARAQGTHVLVHCKMGVSRS 420
MAREIDNFYPERFTYHNVRLWDEESAQLLPHWKETHRFIEAARAQGTHVLVHCKMGVSRS
Sbjct: 31 MAREIDNFYPERFTYHNVRLWDEESAQLLPHWKETHRFIEAARAQGTHVLVHCKMGVSRS 90

Query: 421 AATVLAYAMKQYECLEQALRPIARPNGFLRQLQIYQGILTART 471
AATVLAYAMKQYECLEQALRPIARPNGFLRQLQIYQGILTART
Sbjct: 91 AATVLAYAMKQYECLEQALRPIARPNGFLRQLQIYQGILTART 141

1 CGTCCTTCCT GGTCTGCAG GTCCAGGACT GTCCGCAGGG TTGAGGGAAAG
 51 GGGCCGTGCC CGGTGCCAGC CCAGGTGCTC GCAGGCCTGGC TCCATGGCCC
 101 TGGTCACAGT GAGCCGTTCG CCCCCGGGCA GCAGCGCCTC CACGCCCGTG
 151 GGGCCCTGGG ACCAGGGGGT CCAGCGAAGG AGTCGACTCC AGCGAAGGCA
 201 GAGCTTGCG GTGCTCCGTG GGGCTGTCTC GGGACTGCAG GATGGAGGG
 251 ACAATGATGA TGCAGCAGAG GCCAGTTCTG AGCCAACAGA GAAGGCCCCG
 301 AGTGAGGAGG AGCTCCACGG GGACCAGACA GACTTCGGGC AAGGATCCCA
 351 GAGTCCCCAG AAGCAGGGAGG AGCAGAGGCA GCACCTGCAC CTCATGGTAC
 401 AGCTGCTGAG GCCGCAGGAT GACATCCGCC TGCGAGGCCA GCTGGAGGCA
 451 CCCCCGCCCTC CCCGGCTCCG CTACCTGCTG GTAGTTCTA CACGAGAAGG
 501 AGAAGGTCTG AGCCAGGATG AGACGGTCCT CCTGGGCGTG GATTTCCTG
 551 ACAGCAGCTC CCCCCAGCTC ACCCTGGGCC TGCTTGTGCC CCTCTGGAGT
 601 GACACCCAGG TGTACTTACA TGGAGACGGG GGCTTCAGCG TGACGTCTGG
 651 TGGGCAAAGC CGGATCTTCA AGCCCACATCTC CATCCAGACC ATGTGGGCCA
 701 CACTCCAGGT ATTGCACCAA GCATGTGAGG CAGCTCTAGG CAGCGGCCCT
 751 GTACCGGGTG GCAGTGCCT CACCTGGGCC AGCCACTACC AGGAGAGACT
 801 GAACTCCGAA CAGAGCTGCC TCAATGAGTG GACGGCTATG GCCGACCTGG
 851 AGTCTCTGCG GCCTCCCAGC GCCGAGCCTG GCGGGTCCCTC AGAACAGGAG
 901 CAGATGGAGC AGGCGATCCG TGCTGAGCTG TGAAAGTGT TGGATGTCAG
 951 TGACCTGGAG AGTGTCACTT CCAAAGAGAT CGGCCAGGCT CTGGAGCTGC
 1001 GCCTGGGCT CCCCCCTCCAG CAGTACCGTG ACTTCATCGA CAACCAGATG
 1051 CTGCTGCTGG TGGCACAGCG GGACCGAGCC TCCCGCATCT TCCCCCACCT
 1101 CTACCTGGGC TCAGAGTGGA ACGCAGCAAA CCTGGAGGAG CTGCAGAGGA
 1151 ACAGGGTCAC CCACATCTG AACATGGCCC GGGAGATTGA CAACTTCTAC
 1201 CCTGAGCGCT TCACCTACCA CAATGTGCGC CTCTGGGATG AGGAGTCGGC
 1251 CCAGCTGCTG CCGCACTGGA AGGAGACGCA CCGCTTCATT GAGGCTGCAA
 1301 GAGCACAGGG CACCCACGTG CTGGTCCACT GCAAGATGGG CGTCAGCCGC
 1351 TCAGCGGCCA CAGTGTGGC CTATGCCATG AAGCAGTACG AATGCAGCCT
 1401 GGAGCAGGCC CTGCGCCACG TGCAGGAGCT CGGGCCCCATC GCCCGCCCCA
 1451 ACCCTGGCTT CCTGCGCCAG CTGCAGATCT ACCAGGGCAT CCTGACGGCC
 1501 AGAACCTGAG CCTGGTGGGG AGGAGAAGGT TGAGGCATG GAAGAGAGCC
 1551 AGGCAGCCCC GAAAGAAGAG CCTGGGCCAC GGCCACGTAT AAACCTCCGA
 1601 GGGGTCTGAG GGTCCATCAG TCTTCTGGAG CCCTCCTTGG AGCTGGAGAG
 1651 CACCTCAGAG ACCAGTGCACA TGCCAGAGGT CTCTCTTCC CACGAGTCTT
 1701 CACATGAAGA GCCTCTGCAG CCCTTCCCAC AGCTTGCAAG GACCAAGGG
 1751 GGCCAGCAGG TGGACAGGGG GCCTCAGCCT GCCTGAAGT CCCGCCAGTC
 1801 AGTGGTTACC CTCCAGGGCA GTGCCGTGGT GGCAACCCGG ACCCAGGCCT
 1851 TCCAGGAGCA GGAGCAGGGG CAGGGCAGG GGCAGGGAGA GCCCTGCATT
 1901 TCCTCTACGC CCAGGTTCCG GAAGGTGGTG AGACAGGCCA GCGTGCATGA
 1951 CAGTGGAGAG GAGGGCGAGG CCTGAGCCCT CACACATGCC CACGCTCCCC
 2001 TGACACTGAA GAGGATCCAC AACTCCTTGG AGAAACACCC TCACGTCGT
 2051 TGCCGCACAC ATTCCCTCTA GCTCCGCCCT ATACCCGTCA CTACAGCCTC
 2101 ACCTCCCACC CCTGTCACTA CGGCCTCACC TCCCACCCCT GTCACTACAG
 2151 CCTCACCTCC TACAGCCTA AGTCCCAGGC CCATGTCCTGC CTGTCCAAGG
 2201 GCTCAAGACT TTCTAACTGG GATGTGGTAG AGGGACTGAA GGTACCTTG
 2251 GGGGCAACAG CACCCCTAGTT TCATTCTCAA CTCTAGCCCT GCACACTCAC
 2301 CTGTGGCACG GAATGAAAAG AGAGCTTCCC GTGAAAAAAG GGTACGCCCT
 2351 CCCACCCCG CCCCCCTCCCT GCACCTCCTG TCCTCTCCCA GTTCATTCC
 2401 GGAACCCAGCC AGGCCAGGCA ACCAGTGGCC CCCAAAGGCA GGCAGGATCC
 2451 TCAGGCCCTCA GCCGCAGGGAG GCTGGAAGGG CTGGCAGATC GCTTCCCTCA
 2501 TCCACCTCCA CCGGTCCAGG TCTTGTCTGC TGTCAGGAGA CCTCCTGTGA
 2551 CACCAACGCCA GATCACAGGG CACCAGGCCA GAGATAGTCT TCTTTTGTC
 2601 CTTTCTGGCC TCTGGCTAGT CAGTTTTCA TAGCCTTACA GTATCTGGCT
 2651 TTGTACTGAG AAATAAAACAA CATTTCATA AAAAAAAA AAAAAAAA
 2701 AAAA

FEATURES:

Start: 94
 Exon: 94-1506
 Stop: 1507

CHROMOSOME MAP POSITION:

Bac accession number: AP001885
 Chromosome #: 11

ALLELIC VARIANTS (SNPs):

DNA				Protein		
Position	Major	Minor	Domain	Position	Major	Minor
577	G	A	Exon	162	G	S
1451	G	A	Exon	453	S	N
2641	G	A	Beyond ORF (3')			

Context:

DNA
Position

577 TCTGAGCCAACAGAGAAGGCCCCGAGTGGAGGAGGCTCACGGGGACCAGACAGACTTC
 GGGCAAGGATCCCAGAGTCCCCAGAACAGCAGGAGGAGCAGAGGCAGCACCTGCACCTCATG
 GTACAGCTGCTGAGGCCAGGATGACATCCGCTGGCAGGCCAGCTGGAGGCACCCCG
 CCTCCCCGGCTCCGCTACCTGCTGGTAGTTCTACACGAGAAGGAGAAGGTCTGAGCCAG
 GATGAGACGGTCCTCCTGGCGTGGATTCCCTGACAGCAGCTCCCCAGCTGCACCCCTG
 [G, A]
 GCCTGGCTTGGCCCTCTGGAGTGCACACCCAGGTGTAATTAGATGGAGACGGGGCTTCA
 GCGTGACGTCTGGTGGCAAAGCCGGATCTTCAGGCCATCTCCATCCAGACCATGTGGG
 CCACACTCCAGGTATTGACCAAGCATGTGAGGAGCAGCTCTAGGCAGGGCTTGTACCGG
 GTGGCAGTGCCTCACCTGGCCAGCCACTACCAGGAGAGACTGAACCTCGAACAGAGCT
 GCCTCAATGAGTGGACGGCTATGCCGACCTGGAGTCTCTGGCCCTCCAGCGCCGAGC

1451 ACAGGGTCACCCACATCTTGAACATGGCCGGGAGATTGACAACCTTACCCCTGAGCGCT
 TCACCTACCACAATGTGCGCTCTGGGATGAGGAGTCGGCCAGCTGCTGCCGACTGGA
 AGGAGACGCACCGCTCATGGAGGCTGCAAGAGCACAGGGCACCCACGTGCTGGTCCACT
 GCAAGATGGGCGTCAGCCGCTAGCGGCCACAGTGCTGGCTATGCCATGAAGCAGTACG
 AATGCGAGCCTGGAGCAGGCCCTGCGCACGTGCAGGAGCTCCGGCCATGCCCGCCCCA
 [G, A]
 CCCTGGCTTCTGCCAGCTGCAGATCTACCAAGGCATCCTGACGCCAGAACCTGAGG
 GTGGTGGGAGGAGAAGGTTGTAGGCATGGAAGAGAGCCAGGCAGCCGAAAGAAGAGC
 CTGGGCCACGCCACGTATAAACCTCCGAGGGGTATGAGGTCCATCAGTCTCTGGAGC
 CCTCCTGGAGCTGGAGAGCACCTCAGAGACCAAGTGACATGCCAGAGTCTCTTCCC
 ACGAGTCTTACATGAAGAGCCTGCAAGCCCTCCCACAGCTTGCAAGGACCAAGGGAG

2641 GGTCACGCCCTCCACCCCCGCCCTCCCTGCACCTCCTGTCCTCTCCAGTTCAATTCC
 GGAACCAGCCAGGCCAGCAACCAGTGGCCCCAAAGGCAGGCAGGATCCTCAGGCCCA
 GCGCGGGAGGCTGAAAGGGCTGGCAGATCGCTCCCTCATCCACCTCCACCGGTCCAGG
 TCTTTGCTGCTGCTCCAGACCTCCTGTGACACCACGCCAGATCACAGGGCACAGGCCA
 GAGATAGTCTCTTTGCTGCTTCTGGCTCTGGTAGTCAGTTTCATAGCCTTACA
 [G, A]
 TATCTGGCTTGACTGAGAAATAAACACATTTCATAAAAAAAAAAAAAAA
 AAA

GENE STRUCTURE MODEL:

SPLICE FORM 2 5'-e1-e2-e3-e4-e5-e6-e7-e8-e9-e10-e11-e12-e13-e14-3'
 SPLICE FORM 1 5'-e1-e2-e3-e4-e5-e6-e7-e8-e9-e10-e11-e12-----3'
 SPLICE FORM 3 5'-e1-e2-e3-e4-e5-e6-----e8-e9-e10-e11-e12-----3'

MULTIPLE ALIGNMENT OF CDNA SEQUENCES:

SPLICE FORM 2 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ TG GTTGAGGGAA
 SPLICE FORM 1 CGTCCTTCCT GGTCTGCGG GTCCAGGACT GT.CCGCGGG GTTGAGGGAA
 SPLICE FORM 3 ~~~~~CCT GGTCTGCGG GTCCAGGACT GTCCCGCGGG GTTGAGGGAA

51 100
 SPLICE FORM 2 GGGGCCGTGC CCGGTGCCAG CCCAGGTGCT CGCGGCCTGG CTCCATGCC

SPLICE FORM 1 GGGGCCGTGC CGGGTGCAG CCCAGGTGCT CGCGGCCCTGG CTCCATGGCC
 SPLICE FORM 3 GGGGCCGTGC CGGGTGCAG CCCAGGTGCT CGCGGCCCTGG CTCCATGGCC

101 150

SPLICE FORM 2 CTGGTCACAG TGAGCCGTTG GCCCCCGGGC AGCGGCGCCT CCACGCCCGT
 SPLICE FORM 1 CTGGTCACAG TGAGCCGTTG GCCCCCGGGC AGCGGCGCCT CCACGCCCGT
 SPLICE FORM 3 CTGGTCACAG TGAGCCGTTG GCCCCCGGGC AGCGGCGCCT CCACGCCCGT

151 200

SPLICE FORM 2 GGGGCCCTGG GACCAGGCGG TCCAGCGAAG GAGTCGACTC CAGCGAAGGC
 SPLICE FORM 1 GGGGCCCTGG GACCAGGCGG TCCAGCGAAG GAGTCGACTC CAGCGAAGGC
 SPLICE FORM 3 GGGGCCCTGG GACCAGGCGG TCCAGCGAAG GAGTCGACTC CAGCGAAGGC

201 250

SPLICE FORM 2 AGAGCTTTGC GGTGCTCCGT GGGGCTGTCC TGGGACTGCA GGATGGAGGG
 SPLICE FORM 1 AGAGCTTTGC GGTGCTCCGT GGGGCTGTCC TGGGACTGCA GGATGGAGGG
 SPLICE FORM 3 AGAGCTTTGC GGTGCTCCGT GGGGCTGTCC TGGGACTGCA GGATGGAGGG

251 300

SPLICE FORM 2 GACAATGATG ATGCAGCAGA GGCCAGTTCT GAGCCAACAG AGAAGGCC
 SPLICE FORM 1 GACAATGATG ATGCAGCAGA GGCCAGTTCT GAGCCAACAG AGAAGGCC
 SPLICE FORM 3 GACAATGATG ATGCAGCAGA GGCCAGTTCT GAGCCAACAG AGAAGGCC

301 350

SPLICE FORM 2 GAGTGAGGAG GAGCTCCACG GGGACCAGAC AGACTTCGGG CAAGGATCCC
 SPLICE FORM 1 GAGTGAGGAG GAGCTCCACG GGGACCAGAC AGACTTCGGG CAAGGATCCC
 SPLICE FORM 3 GAGTGAGGAG GAGCTCCACG GGGACCAGAC AGACTTCGGG CAAGGATCCC

351 400

SPLICE FORM 2 AGAGTCCCCA GAAGCAGGAG GAGCAGAGGC AGCACCTGCA CCTCATGGTA
 SPLICE FORM 1 AGAGTCCCCA GAAGCAGGAG GAGCAGAGGC AGCACCTGCA CCTCATGGTA
 SPLICE FORM 3 AGAGTCCCCA GAAGCAGGAG GAGCAGAGGC AGCACCTGCA CCTCATGGTA

401 450

SPLICE FORM 2 CAGCTGCTGA GGCGCAGGA TGACATCCGC CTGGCAGCCC AGCTGGAGGC
 SPLICE FORM 1 CAGCTGCTGA GGCGCAGGA TGACATCCGC CTGGCAGCCC AGCTGGAGGC
 SPLICE FORM 3 CAGCTGCTGA GGCGCAGGA TGACATCCGC CTGGCAGCCC AGCTGGAGGC

451 500

SPLICE FORM 2 ACCCCGGCCT CCCCGGCTCC GCTACCTGCT GGTAGTTCT ACACGAGAAC
 SPLICE FORM 1 ACCCCGGCCT CCCCGGCTCC GCTACCTGCT GGTAGTTCT ACACGAGAAC
 SPLICE FORM 3 ACCCCGGCCT CCCCGGCTCC GCTACCTGCT GGTAGTTCT ACACGAGAAC

501 550

SPLICE FORM 2 GAGAAGGTCT GAGCCAGGAT GAGACGGTCC TCCTGGGCGT GGATTTCC
 SPLICE FORM 1 GAGAAGGTCT GAGCCAGGAT GAGACGGTCC TCCTGGGCGT GGATTTCC
 SPLICE FORM 3 GAGAAGGTCT GAGCCAGGAT GAGACGGTCC TCCTGGGCGT GGATTTCC

551 600

SPLICE FORM 2 GACAGCAGCT CCCCCAGCTG CACCCGGGC CTGGTCTTGC CCCTCTGGAG
 SPLICE FORM 1 GACAGCAGCT CCCCCAGCTG CACCCGGGC CTGGTCTTGC CCCTCTGGAG
 SPLICE FORM 3 GACAGCAGCT CCCCCAGCTG CACCCGGGC CTGGTCTTGC CCCTCTGGAG

601 650

SPLICE FORM 2 TGACACCCAG GTGTACTTAG ATGGAGACGG GGGCTTCAGC GTGACGTCTG
 SPLICE FORM 1 TGACACCCAG GTGTACTTAG ATGGAGACGG GGGCTTCAGC GTGACGTCTG
 SPLICE FORM 3 TGACACCCAG GTGTACTTAG ATGGAGACGG GGGCTTCAGC GTGACGTCTG

651 700

SPLICE FORM 2 GTGGGCAAAG CCGGATCTTC AAGCCCATCT CCATCCAGAC CATGTGGGC
 SPLICE FORM 1 GTGGGCAAAG CCGGATCTTC AAGCCCATCT CCATCCAGAC CATGTGGGC
 SPLICE FORM 3 GTGGGCAAAG CCGGATCTTC AAGCCCATCT CCATCCAGAC CATGT.....

FIGURE 3, page 3 of 8

701	750
SPLICE FORM 2	ACACTCCAGG TATTGCACCA AGCATGTGAG GCAGCTCTAG GCAGCGGCCT
SPLICE FORM 1	ACACTCCAGG TATTGCACCA AGCATGTGAG GCAGCTCTAG GCAGCGGCCT
SPLICE FORM 3
751	800
SPLICE FORM 2	TGTACCGGGT GGCACTGCC TCACCTGGGC CAGCCACTAC CAGGAGAGAC
SPLICE FORM 1	TGTACCGGGT GGCACTGCC TCACCTGGGC CAGCCACTAC CAGGAGAGAC
SPLICE FORM 3
801	850
SPLICE FORM 2	TGAACCTCGA ACAGAGCTGC CTCAATGAGT GGACGGCTAT GGCCGACCTG
SPLICE FORM 1	TGAACCTCGA ACAGAGCTGC CTCAATGAGT GGACGGCTAT GGCCGACCTG
SPLICE FORM 3
851	900
SPLICE FORM 2	GAGTCTCTGC GGCTCCCAG CGCCGAGCCT GGCGGGTCCT CAGAACAGGA
SPLICE FORM 1	GAGTCTCTGC GGCTCCCAG CGCCGAGCCT GGCGGGTCCT CAGAACAGGA
SPLICE FORM 3 GGTCTT CAGAACAGGA
901	950
SPLICE FORM 2	GCAGATGGAG CAGGCGATCC GTGCTGAGCT GTGGAAAGTG TTGGATGTCA
SPLICE FORM 1	GCAGATGGAG CAGGCGATCC GTGCTGAGCT GTGGAAAGTG TTGGATGTCA
SPLICE FORM 3	GCAGATGGAG CAGGCGATCC GTGCTGAGCT GTGGAAAGTG TTGGATGTCA
951	1000
SPLICE FORM 2	GTGACCTGGA GAGTGTCACT TCCAAAGAGA TCCGCCAGGC TCTGGAGCTG
SPLICE FORM 1	GTGACCTGGA GAGTGTCACT TCCAAAGAGA TCCGCCAGGC TCTGGAGCTG
SPLICE FORM 3	GTGACCTGGA GAGTGTCACT TCCAAAGAGA TCCGCCAGGC TCTGGAGCTG
1001	1050
SPLICE FORM 2	CGCTGGGGC TCCCCCTCCA GCAGTACCGT GACTTCATCG ACAACCAGAT
SPLICE FORM 1	CGCTGGGGC TCCCCCTCCA GCAGTACCGT GACTTCATCG ACAACCAGAT
SPLICE FORM 3	CGCTGGGGC TCCCCCTCCA GCAGTACCGT GACTTCATCG ACAACCAGAT
1051	1100
SPLICE FORM 2	GCTGCTGCTG GTGGCACAGC GGGACCGAGC CTCCCGCATC TTCCCCCACC
SPLICE FORM 1	GCTGCTGCTG GTGGCACAGC GGGACCGAGC CTCCCGCATC TTCCCCCACC
SPLICE FORM 3	GCTGCTGCTG GTGGCACAGC GGGACCGAGC CTCCCGCATC TTCCCCCACC
1101	1150
SPLICE FORM 2	TCTACCTGGG CTCAGAGTGG AACGCAGCAA ACCTGGAGGA GCTGCAGAGG
SPLICE FORM 1	TCTACCTGGG CTCAGAGTGG AACGCAGCAA ACCTGGAGGA GCTGCAGAGG
SPLICE FORM 3	TCTACCTGGG CTCAGAGTGG AACGCAGCAA ACCTGGAGGA GCTGCAGAGG
1151	1200
SPLICE FORM 2	AACAGGGTCA CCCACATCTT GAACATGGCC CGGGAGATTG ACAACTTCTA
SPLICE FORM 1	AACAGGGTCA CCCACATCTT GAACATGGCC CGGGAGATTG ACAACTTCTA
SPLICE FORM 3	AACAGGGTCA CCCACATCTT GAACATGGCC CGGGAGATTG ACAACTTCTA
1201	1250
SPLICE FORM 2	CCCTGAGCGC TTCACCTACC ACAATGTGCG CCTCTGGAT GAGGAGTCGG
SPLICE FORM 1	CCCTGAGCGC TTCACCTACC ACAATGTGCG CCTCTGGAT GAGGAGTCGG
SPLICE FORM 3	CCCTGAGCGC TTCACCTACC ACAATGTGCG CCTCTGGAT GAGGAGTCGG
1251	1300
SPLICE FORM 2	CCCAGCTGCT GCCGCACTGG AAGGAGACGC ACCGCTTCAT TGAGGCTGCA
SPLICE FORM 1	CCCAGCTGCT GCCGCACTGG AAGGAGACGC ACCGCTTCAT TGAGGCTGCA
SPLICE FORM 3	CCCAGCTGCT GCCGCACTGG AAGGAGACGC ACCGCTTCAT TGAGGCTGCA
1301	1350
SPLICE FORM 2	AGAGCACAGG GCACCCACGT GCTGGTCCAC TGCAAGATGG GCGTCAGCCG
SPLICE FORM 1	AGAGCACAGG GCACCCACGT GCTGGTCCAC TGCAAGATGG GCGTCAGCCG

SPLICE FORM 3 AGAGCACAGG GCACCCACGT GCTGGTCCAC TGCAAGATGG GCGTCAGCCG

1351

1400

SPLICE FORM 2 CTCAGCGGCC ACAGTGCTGG CCTATGCCAT GAAGCAGTAC GAATGCAGCC
SPLICE FORM 1 CTCAGCGGCC ACAGTGCTGG CCTATGCCAT GAAGCAGTAC GAATGCAGCC
SPLICE FORM 3 CTCAGCGGCC ACAGTGCTGG CCTATGCCAT GAAGCAGTAC GAATGCAGCC

1401

1450

SPLICE FORM 2 TGGAGCAGGC CCTGCGCCAC GTGCAGGAGC TCCGGCCCAT CGCCCGCCCC
SPLICE FORM 1 TGGAGCAGGC CCTGCGCCAC GTGCAGGAGC TCCGGCCCAT CGCCCGCCCC
SPLICE FORM 3 TGGAGCAGGC CCTGCGCCAC GTGCAGGAGC TCCGGCCCAT CGCCCGCCCC

1451

1500

SPLICE FORM 2 AACCTGGCT TCCTGCGCCA GCTGCAGATC TACCAGGGCA TCCTGACGGC
SPLICE FORM 1 AACCTGGCT TCCTGCGCCA GCTGCAGATC TACCAGGGCA TCCTGACG..
SPLICE FORM 3 AACCTGGCT TCCTGCGCCA GCTGCAGATC TACCAGGGCA TCCTGACG..

1501

1550

SPLICE FORM 2 CAGCCGCCAG AGCCATGTCT GGGAGCAGAA AGTGGGTGGG GTCTCCCCAG
SPLICE FORM 1
SPLICE FORM 3

1551

1600

SPLICE FORM 2 AGGAGCACCC AGCCCTGAA GTCTCTACAC CATTCCCACT TCTTCCGCCA
SPLICE FORM 1
SPLICE FORM 3

1601

1650

SPLICE FORM 2 GAACTGAGG GTGGTGGGGA GGAGAAGGTT GTAGGCATGG AAGAGAGCCA
SPLICE FORM 1 GAACTGAGG GTGGTGGGGA GGAGAAGGTT GTAGGCATGG AAGAGAGCCA
SPLICE FORM 3 GAACTGAGG GTGGTGGGGA GGAGAAGGTT GTAGGCATGG AAGAGAGCCA

1651

1700

SPLICE FORM 2 GGCAGCCCCG AAAGAAGAGC CTGGG..CCA CGGCCACGTA TAAACCTCCG
SPLICE FORM 1 GGCAGCCCCG AAAGAAGAGC CTGGG..CCA CGGCCACGTA TAAACCTCCG
SPLICE FORM 3 GGCAGCCCCG AAAGAAGAGC CTGGGGCAC GGGGCACGTA TAAACCTCCG

1701

1750

SPLICE FORM 2 AGGGGTATG AGGTCCATCA GTCTTCTGGA GCCCTCCTT. GGAGCTGGAG
SPLICE FORM 1 AGGGGTATG AGGTCCATCA GTCTTCTGGA GCCCTCCTT. GGAGCTGGAG
SPLICE FORM 3 AGGGGTATG AGGTCCATCA GTCTTCTGGA GCCCTCCTG GGAGCTGGAG

1751

1800

SPLICE FORM 2 AGCACCTCAG .AGACCAGTG ACATGCCAGA GGTCTTCTCT TCCCACGAGT
SPLICE FORM 1 AGCACCTCAG .AGACCAGTG ACATGCCAGA GGTCTTCTCT TCCCACGAGT
SPLICE FORM 3 AGCACCTCAG TAGACCAGTG ACATGCCAGA GGTCTTCTCT TCCCACGAGT

1801

1850

SPLICE FORM 2 CTTCACATGA AGAGCCTCTG CAGCCCTTCC CACAGCTTGC AAGGACCAAG
SPLICE FORM 1 CTTCACATGA AGAGCCTCTG CAGCCCTTCC CACAGCTTGC AAGGACCAAG
SPLICE FORM 3 CTTCACATGA AGAGCCTCTG CAGCCCTTCC CACAGCTTGC AAGGACCAAG

1851

1900

SPLICE FORM 2 GGAGGCCAGC AGGTGGACAG GGGGCCTCAG CCTGCCCTGA AGTCCCGCCA
SPLICE FORM 1 GGAGGCCAGC AGGTGGACAG GGGGCCTCAG CCTGCCCTGA AGTCCCGCCA
SPLICE FORM 3 GGAGGCCAGC AGGTGGACAG GGGGCCTCAG CCTGCCCTGA AGTCCCGCCA

1901

1950

SPLICE FORM 2 GTCAGTGGTT ACCCTCCAGG GCAGTGCCGT GGTGGCCAAC CGGACCCAGG
SPLICE FORM 1 GTCAGTGGTT ACCCTCCAGG GCAGTGCCGT GGTGGCCAAC CGGACCCAGG
SPLICE FORM 3 GTCAGTGGTT ACCCTCCAGG GCAGTGCCGT GGTGGCCAAC CGGACCCAGG

1951

2000

SPLICE FORM 2 CCTTCCAGGA GCAGGAGCAG GGGCAGGGC AGGGCAGGG AGAGCCCTGC
 SPLICE FORM 1 CCTTCCAGGA GCAGGAGCAG GGGCAGGGC AGGGCAGGG AGAGCCCTGC
 SPLICE FORM 3 CCTTCCAGGA GCAGGAGCAG GGGCAGGGC AGGGCAGGG AGAGCCCTGC

2001 2050

SPLICE FORM 2 ATTCCTCTA CGCCCAGGTT CCGGAAGGTG GTGAGACAGG CCAGCGTGCA
 SPLICE FORM 1 ATTCCTCTA CGCCCAGGTT CCGGAAGGTG GTGAGACAGG CCAGCGTGCA
 SPLICE FORM 3 ATTCCTCTA CGCCCAGGTT CCGGAAGGTG GTGAGACAGG CCAGCGTGCA

2051 2100

SPLICE FORM 2 TGACAGTGGA GAGGAGGGCG AGGCCTGAGC CCTCACACAT GCCCACGCTC
 SPLICE FORM 1 TGACAGTGGA GAGGAGGGCG AGGCCTGAGC CCTCACACAT GCCCACGCTC
 SPLICE FORM 3 TGACAGTGGA GAGGAGGGCG AGGCCTGAGC CCTCACACAT GCCCACGCTC

2101 2150

SPLICE FORM 2 CCCTGACACT GAAGAGGATC CACAACTCCT TGGAGAAACA CCCTCAGGTC
 SPLICE FORM 1 CCCTGACACT GAAGAGGATC CACAACTCCT TGGAGAAACA CCCTCAGGTC
 SPLICE FORM 3 CCCTGACACT GAAGAGGATC CACAACTCCT TGGAGAAACA CCCTCAGGTC

2151 2200

SPLICE FORM 2 TGTGCGCA CACATTCTC TCAGCTCCGC CCCATACCCG TCACTACAGC
 SPLICE FORM 1 TGTGCGCA CACATTCTC TCAGCTCCGC CCCATACCCG TCACTACAGC
 SPLICE FORM 3 TGTGCGCA CACATTCTC TCAGCTCCGC CCCATACCCG TCACTACAGC

2201 2250

SPLICE FORM 2 CTCACCTCCC ACCCCTGTCA CTACGGCCTC ACCTCCCACC CCTGTCACTA
 SPLICE FORM 1 CTCACCTCCC ACCCCTGTCA CTACGGCCTC ACCTCCCACC CCTGTCACTA
 SPLICE FORM 3 CTCACCTCCC ACCCCTGTCA CTACGGCCTC ACCTCCCACC CCTGTCACTA

2251 2300

SPLICE FORM 2 CAGCCTCACC TCCTACAGCC TTAAGTCCC GGCCCATGTC TGCCTGTCCA
 SPLICE FORM 1 CAGCCTCACC TCCTACAGCC TTAAGTCCC GGCCCATGTC TGCCTGTCCA
 SPLICE FORM 3 CAGCCTCACC TCCTACAGCC TTAAGTCCC GGCCCATGTC TGCCTGTCCA

2301 2350

SPLICE FORM 2 AGGGCTCAAG ACTTTCTAAC TGGGATGTGG TAGAGGGACT GAAGGTACCT
 SPLICE FORM 1 AGGGCTCAAG ACTTTCTAAC TGGGATGTGG TAGAGGGACT GAAGGTACCT
 SPLICE FORM 3 AGGGCTCAAG ACTTTCTAAC TGGGATGTGG TAGAGGGACT GAAGGTACCT

2351 2400

SPLICE FORM 2 TTGGGGGCAA CAGCACCTA GTTTCATTCT CAACTCTAGC CCTGCACACT
 SPLICE FORM 1 TTGGGGGCAA CAGCACCTA GTTTCATTCT CAACTCTAGC CCTGCACACT
 SPLICE FORM 3 TTGGGGGCAA CAGCACCTA GTTTCATTCT CAACTCTAGC CCTGCACACT

2401 2450

SPLICE FORM 2 CACCTGTGGC ACGGAATGAA AACAGAGCTT CCCGTGCAA AAGGGTCACG
 SPLICE FORM 1 CACCTGTGGC ACGGAATGAA AACAGAGCTT CCCGTGCAA AAGGGTCACG
 SPLICE FORM 3 CACCTGTGGC ACGGAATGAA AACAGAGCTT CCCGTGCAA AAGGGTCACG

2451 2500

SPLICE FORM 2 CCTCCACCC CCGCCCCCTC CCTGCACCTC CTGCTCTC CCAGTTCAATT
 SPLICE FORM 1 CCTCCACCC CCGCCCCCTC CCTGCACCTC CTGCTCTC CCAGTTCAATT
 SPLICE FORM 3 CCTCCACCC CCGCCCCCTC CCTGCACCTC CTGCTCTC CCAGTTCAATT

2501 2550

SPLICE FORM 2 CCTGGAACCA GCCAGGCCAG GCAACCAGTG GCCCCCAAAG GCAGGCAGGA
 SPLICE FORM 1 CCTGGAACCA GCCAGGCCAG GCAACCAGTG GCCCCCAAAG GCAGGCAGGA
 SPLICE FORM 3 CCTGGAACCA GCCAGGCCAG GCAACCAGTG GCCCCCAAAG GCAGGCAGGA

2551 2600

SPLICE FORM 2 TCCTCAGGCC CCAGCCGCG GAGGCTGGAA GGGCTGGCAG ATCGCTCCCC
 SPLICE FORM 1 TCCTCAGGCC CCAGCCGCG GAGGCTGGAA GGGCTGGCAG ATCGCTCCCC
 SPLICE FORM 3 TCCTCAGGCC CCAGCCGCG GAGGCTGGAA GGGCTGGCAG ATCGCTCCCC

2601
 SPLICE FORM 2 TCATCCACCT CCACCGGTCC AGGTCTTTGC TGCTGTCCCC AGACCTCCTG
 SPLICE FORM 1 TCATCCACCT CCACCGGTCC AGGTCTTTGC TGCTGTCCCC AGACCTCCTG
 SPLICE FORM 3 TCATCCACCT CCACCGGTCC AGGTCTTTGC TGCTGTCCCC AGACCTCCTG

2651
 SPLICE FORM 2 TGACACCACG CCAGATCACA GGGCACCAGG CCAGAGATAG TCTTCTTTT
 SPLICE FORM 1 TGACACCACG CCAGATCACA GGGCACCAGG CCAGAGATAG TCTTCTTTT
 SPLICE FORM 3 TGACACCACG CCAGATCACA GGGCACCAGG CCAGAGATAG TCTTCTTTT

2701
 SPLICE FORM 2 GTCCTTCTG GCCTCTGGCT AGTCAGTTT TCATAGCCTT ACAGTATCTG
 SPLICE FORM 1 GTCCTTCTG GCCTCTGGCT AGTCAGTTT TCATAGCCTT ACAGTATCTG
 SPLICE FORM 3 GTCCTTCTG GCCTCTGGCT AGTCAGTTT TCATAGCCTT ACAGTATCTG

2751
 SPLICE FORM 2 GCTTGTACT GAGAAATAAA ACACATTTTC ATAAAAAAA AAAAAAAA
 SPLICE FORM 1 GCTTGTACT GAGAAATAAA ACACATTTTC ATAAAAAAA AAAAAAAA
 SPLICE FORM 3 GCTTGTACT GAGAAATAAA ACACATTTTC ATATTTGGTT AAAAAAAA

2801
 SPLICE FORM 2 AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA
 SPLICE FORM 1 AAAAAAA~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
 SPLICE FORM 3 AAAAAAAA AAAAAAAA AAAAAAAA AAAA~~~~~ ~~~~~

2851
 SPLICE FORM 2 AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAA
 SPLICE FORM 1 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
 SPLICE FORM 3 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~

2894
 SPLICE FORM 2 AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAA
 SPLICE FORM 1 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
 SPLICE FORM 3 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~

MULTIPLE ALIGNMENT OF PEPTIDE SEQUENCES:
 SPLICE FORM 2 MALTVSRSP PGSGASTPVG PWDQAVQRSS RLQRQSFV LRGAVLGLQD
 SPLICE FORM 1 MALTVSRSP PGSGASTPVG PWDQAVQRSS RLQRQSFV LRGAVLGLQD
 SPLICE FORM 3 MALTVSRSP PGSGASTPVG PWDQAVQRSS RLQRQSFV LRGAVLGLQD

51
 SPLICE FORM 2 GGDNDDAAEA SSEPEKAPS EEELHGDQTD FGQGSQSPQK QEEQRQHLHL
 SPLICE FORM 1 GGDNDDAAEA SSEPEKAPS EEELHGDQTD FGQGSQSPQK QEEQRQHLHL
 SPLICE FORM 3 GGDNDDAAEA SSEPEKAPS EEELHGDQTD FGQGSQSPQK QEEQRQHLHL

101
 SPLICE FORM 2 MVQLLRPQDD IRLAAQLEAP RPPRLRYLLV VSTREGEGLS QDETVLGLVD
 SPLICE FORM 1 MVQLLRPQDD IRLAAQLEAP RPPRLRYLLV VSTREGEGLS QDETVLGLVD
 SPLICE FORM 3 MVQLLRPQDD IRLAAQLEAP RPPRLRYLLV VSTREGEGLS QDETVLGLVD

151
 SPLICE FORM 2 FPDSSSPSCT LGLVLPLWSD TQVYLDGDGG FSVTSGGQSR IFKPISIQT
 SPLICE FORM 1 FPDSSSPSCT LGLVLPLWSD TQVYLDGDGG FSVTSGGQSR IFKPISIQT
 SPLICE FORM 3 FPDSSSPSCT LGLVLPLWSD TQVYLDGDGG FSVTSGGQSR IFKPISIQT

201
 SPLICE FORM 2 WATLQLVLHQA CEAALGSGLV PGGSALTWAS HYQERLNSEQ SCLNEWTAMA
 SPLICE FORM 1 WATLQLVLHQA CEAALGSGLV PGGSALTWAS HYQERLNSEQ SCLNEWTAMA
 SPLICE FORM 3 W.....

251
 SPLICE FORM 2 DLESLRPPSA EPGGSSSEQQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL
 SPLICE FORM 1 DLESLRPPSA EPGGSSSEQQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL
 SPLICE FORM 3 SSEQQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL

301
 SPLICE FORM 2 DLESLRPPSA EPGGSSSEQQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL
 SPLICE FORM 1 DLESLRPPSA EPGGSSSEQQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL
 SPLICE FORM 3 SSEQQ MEQAIRAELW KVLDVSDLES VTSKEIRQAL

SPLICE FORM 2 ELRLGLPLQQ YRDFIDNQML LLVAQRDRAS RIFPHLYLGS EWNAANLEEL
 SPLICE FORM 1 ELRLGLPLQQ YRDFIDNQML LLVAQRDRAS RIFPHLYLGS EWNAANLEEL
 SPLICE FORM 3 ELRLGLPLQQ YRDFIDNQML LLVAQRDRAS RIFPHLYLGS EWNAANLEEL

351 400

SPLICE FORM 2 QRNRVTHILN MAREIDNFYP ERFTYHNVR L WDEESAQLLP HWKETHRFIE
 SPLICE FORM 1 QRNRVTHILN MAREIDNFYP ERFTYHNVR L WDEESAQLLP HWKETHRFIE
 SPLICE FORM 3 QRNRVTHILN MAREIDNFYP ERFTYHNVR L WDEESAQLLP HWKETHRFIE

401 450

SPLICE FORM 2 AARAQGTHVL VHCKMGVSRS AATVILAYAMK QYECSLEQAL RHVQELRPIA
 SPLICE FORM 1 AARAQGTHVL VHCKMGVSRS AATVILAYAMK QYECSLEQAL RHVQELRPIA
 SPLICE FORM 3 AARAQGTHVL VHCKMGVSRS AATVILAYAMK QYECSLEQAL RHVQELRPIA

451 500

SPLICE FORM 2 RPNPGFLRQL QIYQGILTAS RQSHVWEQKV GGVSPEEHPA PEVSTPFPLL
 SPLICE FORM 1 RPNPGFLRQL QIYQGILTAR T~~~~~ T~~~~~ T~~~~~
 SPLICE FORM 3 RPNPGFLRQL QIYQGILTAR T~~~~~ T~~~~~ T~~~~~

501 550

SPLICE FORM 2 PPEPEGGEE KVVGMEESQA APKEEPGPRP RINLRGVMRS ISLLEPSLEL
 SPLICE FORM 1 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
 SPLICE FORM 3 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~

551 600

SPLICE FORM 2 ESTSETSDMP EVFSSHESHH EEPQLQFPQL ARTKGGQQVD RGQPALKSR
 SPLICE FORM 1 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
 SPLICE FORM 3 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~

601 650

SPLICE FORM 2 QSVVTLQGSA VVANRTQAFQ EQEQQOGOGOQ GEPCISSTPR FRKVVRQASV
 SPLICE FORM 1 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~
 SPLICE FORM 3 ~~~~~ ~~~~~ ~~~~~ ~~~~~ ~~~~~

651

SPLICE FORM 2 HDSGEEGEA
 SPLICE FORM 1 ~~~~~
 SPLICE FORM 3 ~~~~~